



Dart Aerospace Ltd.
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200

Ship May 24
Cveln 5782

648.4702

Job Sheet 176678



2

Part No: 648.4702

Job Qty: 1 ea

Part Name: C3 Overhaul Kit



Part Weight: 0 lbs

Status: Scheduled

Priority: Medium

Job Created: 4/27/18

Job Tracking No:

Due Date: 5/24/18

Created By: Marie Lajeunesse

Type: SOLD

Description:

Note: O&OPM-C3 REV.4 IPP REV:A 17.12.11 NEW ISSUE DD VERF:JFS

Ship Via:

003345

At Planning

Bill of Materials

Job Routing

Op No	Operation	Qty	Start Date	Due Date	Standard		Workcenter/Supplier		Sign-off
					Setup	Run	Workcenter / Supplier	Lead Time	
90	Start up Operation	1 Ea	5/24/18	5/24/18	0.00	0.00	Start Up Stores/Pkg-1		18-05-23
110	Small Fab	1 pcs	5/24/18	5/24/18	0.00	1.00	Small Fab-9		18-05-23
120	QC	1 pcs	5/24/18	5/24/18	0.00	0.00	QC4		38
125	DC	1 pcs	5/24/18	5/24/18	0.00	0.00	DC		9-89
130	Packaging	1 pcs	5/24/18	5/24/18	0.00	0.00	Packaging3-1		MAY 24 2018
140	QC21-FG	1 Ea	5/24/18	5/24/18	0.00	0.00	QC21		

Part Op 110 - Pick kit

Descriptions: 125 - Photocopy bluefile & type labels per PPP 648.7402

130 - Identify and pack for shipping as per PPP 648.4702

DAS
21
9-89

MAY 7 4 2018

Job BOM

Part / Item	Component Name	Quantity	Operation	Container
188-FPSS-1032-1/4	Set Screw	2 Ea (2 ea)	90-Start up Operation	5058750
188-FSCS-832-5/8	Clock Spring Cover Screw	4 Ea (4 ea)	90-Start up Operation	5038399
600.1309-A	Label	1 Ea (1 ea)	90-Start up Operation	5064516
600.1313	C3 Warning Label	1 Ea (1 ea)	90-Start up Operation	5029483
AN4-16A	Bolt	3 Ea (3 ea)	90-Start up Operation	5068654
C2-14-2	Label Rivets	2 Ea (2 ea)	90-Start up Operation	5040661
C2-3-1	Bearing DU	2 pcs (2 ea)	90-Start up Operation	5068886
C2-3-2-1	Roller Pin Retaining Ring	2 Ea (2 ea)	90-Start up Operation	5056845
C2-3-3-1	Latch Roller DU Bearing	1 Ea (1 ea)	90-Start up Operation	5050472
C2-3-5	Spacer, Teflon	2 Ea (2 ea)	90-Start up Operation	5058758
C2-3-8	Actuator Bushing	2 Ea (2 ea)	90-Start up Operation	5072543
C3-10-2	Lock Spring	1 Ea (1 ea)	90-Start up Operation	5070352
C3-12-1	Lock Bushing	2 Ea (2 ea)	90-Start up Operation	5035073
C3-12-6 (5100-0037-SPP)	Lock Roller Retaining Ring	2 pcs (2 ea)	90-Start up Operation	5066126
C3-13-1 (00FBU04)	Keeper DU-Bearing Bushing	2 pcs (2 ea)	90-Start up Operation	5029270
C3-13-5 (BENDOFF)	Keeper Spring	1 pcs (1 ea)	90-Start up Operation	5029273
C3-3-4-1 (5100-0042-SPP)	Retaining Ring	4 pcs (4 ea)	90-Start up Operation	5032318
C3-3-9	Actuator Spring	1 pcs (1 ea)	90-Start up Operation	5029280
C3-4-1	Load Beam Bushing	2 Ea (2 ea)	90-Start up Operation	5072098
C3-7-1	Load Beam Bumper	1 Ea (1 ea)	90-Start up Operation	5062797
C3-7-2	Lock Bumper	2 Ea (2 ea)	90-Start up Operation	5067293
C3-8-4	Solenoid Cover Gasket	1 pcs (1 ea)	90-Start up Operation	5029287

16.05.23

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS <table style="width:100%; border-collapse: collapse;"> <tr> <td style="width:15%;">Skid-tube ☐</td> <td style="width:15%;">Cross tube ☐</td> <td style="width:15%;">Water Jet ☐</td> <td style="width:15%;">Engineering ☐</td> </tr> <tr> <td>Machining ☐</td> <td>Small Fab ☐</td> <td>Prod. Eng. Coord. ☐</td> <td>Quality ☐</td> </tr> <tr> <td>Thermoforming ☐</td> <td>Finishing ☐</td> <td>Rec/Store/Packaging ☐</td> <td>Other ☐</td> </tr> <tr> <td>Large Fab ☐</td> <td>Composite ☐</td> <td>Supplier ☐</td> <td></td> </tr> </table>						Skid-tube ☐	Cross tube ☐	Water Jet ☐	Engineering ☐	Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐	Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐	Large Fab ☐	Composite ☐	Supplier ☐																																																																																																																																	
Skid-tube ☐	Cross tube ☐	Water Jet ☐	Engineering ☐																																																																																																																																																						
Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐																																																																																																																																																						
Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐																																																																																																																																																						
Large Fab ☐	Composite ☐	Supplier ☐																																																																																																																																																							
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval																																																																																																																																																		
Dart Aerospace Ltd. 1270 Aberdeen Street Haverhill, MA 01830 CANADA TEL: 1 513 632-6200 Email: sales@dartaero.com www.dartaerospace.com DART AEROSPACE Container No: S073371 Part: 648.4702 Job No: 176678 Serial No/Batch: S073371 Revision: 4 Inspector: Date: 05/23/18								Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval																																																																																																																																																	
Root Cause <table style="width:100%; border-collapse: collapse;"> <tr> <td style="width:15%;">Environment ☐</td> <td style="width:15%;">No Re-verification ☐</td> <td style="width:15%;"></td> <td style="width:15%;"></td> <td style="width:15%;"></td> <td style="width:15%;"></td> <td style="width:15%;"></td> <td style="width:15%;"></td> </tr> <tr> <td>Design ☐</td> <td>Operator ☐</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Doc/Data ☐</td> <td>Offset/Setup ☐</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Equip/Tooling ☐</td> <td>Supplier ☐</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Handling/Pre ☐</td> <td>Training ☐</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Material ☐</td> <td>Use for Testing ☐</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Internal Transport ☐</td> <td>Poor Information ☐</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Tribal Knowledge ☐</td> <td>Rushing ☐</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>LOA ☐</td> <td>Product Improvement ☐</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Substation ☐</td> <td>Process Improvement ☐</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Past Expiry Date ☐</td> <td>Manufacturing Process ☐</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Misidentified ☐</td> <td>Past Due ☐</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> </table>				Environment ☐	No Re-verification ☐							Design ☐	Operator ☐							Doc/Data ☐	Offset/Setup ☐							Equip/Tooling ☐	Supplier ☐							Handling/Pre ☐	Training ☐							Material ☐	Use for Testing ☐							Internal Transport ☐	Poor Information ☐							Tribal Knowledge ☐	Rushing ☐							LOA ☐	Product Improvement ☐							Substation ☐	Process Improvement ☐							Past Expiry Date ☐	Manufacturing Process ☐							Misidentified ☐	Past Due ☐							<table style="width:100%; border-collapse: collapse;"> <tr> <td style="width:15%;"></td> <td style="width:15%;">Crimp/Kink/Ripple/Wave ☐</td> <td style="width:15%;">Inspection incomplete/unclear ☐</td> <td style="width:15%;">Out of Sequence ☐</td> <td style="width:15%;">Positioned Wrong ☐</td> </tr> <tr> <td></td> <td>Cuffs ☐</td> <td>Contamination ☐</td> <td>Off-set ☐</td> <td>Outside Dimensions ☐</td> </tr> <tr> <td></td> <td>Crushing ☐</td> <td>Countersink ☐</td> <td>Mislabeled ☐</td> <td>Over/Under tolerance ☐</td> </tr> <tr> <td></td> <td>Heat Treat ☐</td> <td>Cut Too Short ☐</td> <td>Fit/Function ☐</td> <td>Part Incorrect ☐</td> </tr> <tr> <td></td> <td>Wave/Twist in Tube ☐</td> <td>Instructions Incomplete/Unclear ☐</td> <td>Misaligned/off center ☐</td> <td>Part Lost/Missing ☐</td> </tr> <tr> <td></td> <td>Marks/Chatter ☐</td> <td>Drill Holes ☐</td> <td></td> <td>Part Moved ☐</td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td>Drawing ☐</td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td>Finish ☐</td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td>Misread ☐</td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td>Turning Sequence ☐</td> </tr> </table>					Crimp/Kink/Ripple/Wave ☐	Inspection incomplete/unclear ☐	Out of Sequence ☐	Positioned Wrong ☐		Cuffs ☐	Contamination ☐	Off-set ☐	Outside Dimensions ☐		Crushing ☐	Countersink ☐	Mislabeled ☐	Over/Under tolerance ☐		Heat Treat ☐	Cut Too Short ☐	Fit/Function ☐	Part Incorrect ☐		Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Misaligned/off center ☐	Part Lost/Missing ☐		Marks/Chatter ☐	Drill Holes ☐		Part Moved ☐					Drawing ☐					Finish ☐					Misread ☐					Turning Sequence ☐
Environment ☐	No Re-verification ☐																																																																																																																																																								
Design ☐	Operator ☐																																																																																																																																																								
Doc/Data ☐	Offset/Setup ☐																																																																																																																																																								
Equip/Tooling ☐	Supplier ☐																																																																																																																																																								
Handling/Pre ☐	Training ☐																																																																																																																																																								
Material ☐	Use for Testing ☐																																																																																																																																																								
Internal Transport ☐	Poor Information ☐																																																																																																																																																								
Tribal Knowledge ☐	Rushing ☐																																																																																																																																																								
LOA ☐	Product Improvement ☐																																																																																																																																																								
Substation ☐	Process Improvement ☐																																																																																																																																																								
Past Expiry Date ☐	Manufacturing Process ☐																																																																																																																																																								
Misidentified ☐	Past Due ☐																																																																																																																																																								
	Crimp/Kink/Ripple/Wave ☐	Inspection incomplete/unclear ☐	Out of Sequence ☐	Positioned Wrong ☐																																																																																																																																																					
	Cuffs ☐	Contamination ☐	Off-set ☐	Outside Dimensions ☐																																																																																																																																																					
	Crushing ☐	Countersink ☐	Mislabeled ☐	Over/Under tolerance ☐																																																																																																																																																					
	Heat Treat ☐	Cut Too Short ☐	Fit/Function ☐	Part Incorrect ☐																																																																																																																																																					
	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Misaligned/off center ☐	Part Lost/Missing ☐																																																																																																																																																					
	Marks/Chatter ☐	Drill Holes ☐		Part Moved ☐																																																																																																																																																					
				Drawing ☐																																																																																																																																																					
				Finish ☐																																																																																																																																																					
				Misread ☐																																																																																																																																																					
				Turning Sequence ☐																																																																																																																																																					
OTHER :																																																																																																																																																									

NAS1149F0463P	Washer ✓	8 Ea (8 ea)	90-Start up Operation	5056461
MS21044N4	Nut, Self-Locking ✓	4 Ea (4 ea)	90-Start up Operation	5058122
AN4-17A	Bolt ✓	1 Ea (1 ea)	90-Start up Operation	5067893
MS21083N3	Nut ✓	2 Ea (2 ea)	90-Start up Operation	5036469
NAS1149F0332P	Washer ✓	2 Ea (2 ea)	90-Start up Operation	5068663
MS35266-63	Solenoid Cover Screw ✓	1 Ea (1 ea)	90-Start up Operation	5038767
NAS1149F0363P	Washer ✓	1 Ea (1 ea)	90-Start up Operation	5027738
AN6-15A	Bolt ✓	1 Ea (1 ea)	90-Start up Operation	5049842
MS21083N6	Nut ✓	1 Ea (1 ea)	90-Start up Operation	5036359
NAS1149F0632P	Washer ✓	2 Ea (2 ea)	90-Start up Operation	5048297

Job Allocations

Operation	Component Part	Required	Inventory	Allocated
90-Start up Operation	188-FPSS-1032-1/4	2	104	0
	188-FSCS-832-5/8	4	180	0
	600.1309-A	1	0	0
	600.1313	1	0	0
	AN4-16A	3	239	0
	AN4-17A	1	163	0
	AN6-15A	1	11	0
	C2-14-2	2	264	0
	C2-3-1	2	0	0
	C2-3-2-1	2	100	0
	C2-3-3-1	1	29	0
	C2-3-5	2	100	0
	C2-3-8	2	6	0
	C3-10-2	1	0	0
	C3-12-1	2	34	0
	C3-12-6 (5100-0037-SPP)	2	0	0
	C3-13-1 (06FDU04)	2	0	0
	C3-13-5 (DENDOFF)	1	0	0
	C3-3-4-1 (5100-0012-SPP)	4	0	0
	C3-3-9	1	0	0
	C3-4-1	2	0	0
	C3-7-1	1	10	0
	C3-7-2	2	0	0
	C3-8-4	1	0	0
	MS21044N4	4	158	0
	MS21083N3	2	87	0
	MS21083N6	1	25	0
	MS35266-63	1	44	0
	NAS1149F0332P	2	1,675	0
	NAS1149F0363P	1	221	0
	NAS1149F0463P	8	481	0
	NAS1149F0632P	2	446	0

Part Specifications

Specifications could not be found.

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date :	Step #:	QTY Effective :		MRB (QSI042) Approval Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval	
Description Work Order Deviation		Disposition			
Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐		FAULT CATEGORY Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Misabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐			
		OTHER : ☐			